

# Phospho-CDX2(S283) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3701a

#### **Product Information**

**Application** WB, IF, DB, E **Primary Accession** Q99626 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB16600 **Calculated MW** 33520

#### **Additional Information**

**Gene ID** 1045

Other Names Homeobox protein CDX-2, CDX-3, Caudal-type homeobox protein 2, CDX2,

CDX3

**Target/Specificity** This CDX2 Antibody is generated from rabbits immunized with a KLH

conjugated synthetic phosphopeptide corresponding to amino acid residues

surrounding S283 of human CDX2.

**Dilution** WB~~1:1000 IF~~1:10~50 DB~~1:500 E~~Use at an assay dependent

concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This

antibody is purified through a protein A column, followed by peptide affinity

purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Phospho-CDX2(S283) Antibody is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name CDX2

Synonyms CDX3

**Function** Transcription factor which regulates the transcription of multiple genes

expressed in the intestinal epithelium (By similarity). Binds to the promoter of

the intestinal sucrase-isomaltase SI and activates SI transcription (By similarity). Binds to the DNA sequence 5'-ATAAAAACTTAT-3' in the promoter region of VDR and activates VDR transcription (By similarity). Binds to and activates transcription of LPH (By similarity). Activates transcription of CLDN2 and intestinal mucin MUC2 (By similarity). Binds to the 5'-AATTTTTACAACACCT-3' DNA sequence in the promoter region of CA1 and activates CA1 transcription (By similarity). Important in broad range of functions from early differentiation to maintenance of the intestinal epithelial lining of both the small and large intestine. Binds preferentially to methylated DNA (PubMed:28473536).

Cellular Location Nucleus {ECO:0000250 | UniProtKB:P43241}.

**Tissue Location** Detected in small intestine, colon and pancreas.

## **Background**

The level and beta-cell specificity of insulin gene expression are regulated by a set of nuclear proteins that bind to specific sequences within the promoter of the insulin gene (INS; MIM 176730) and interact with RNA polymerase to activate or repress transcription. The proteins LMX1 (MIM 600298) and CDX3 are homeodomain proteins that bind an A/T-rich sequence in the insulin promoter and stimulate its transcription.

### References

Benoit, Y.D., et al. Am. J. Physiol. Gastrointest. Liver Physiol. 298 (4), G504-G517 (2010) Xie, Y., et al. Int. J. Oncol. 36(2):509-516(2010) Park do, Y., et al. Mod. Pathol. 23(1):54-61(2010) Lora, V., et al. Anticancer Res. 29(12):5033-5037(2009) Porjazova, E., et al. Akush Ginekol (Sofiia) 48(4):32-34(2009)

## **Images**

P-Pab

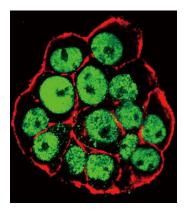
NP-Peptide

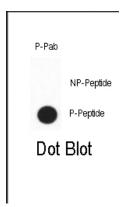
P-Peptide

Dot Blot

Dot blot analysis of Phospho-CDX2(S283) Antibody Phospho-specific Pab (Cat. AP3701a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antobodies working concentration was 0. 5ug per ml.

Confocal immunofluorescent analysis of Phospho-CDX2-S283 Antibody(Cat#AP3701a) with WiDr cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).





Dot blot analysis of anti-Phospho-CDX2 Phospho-specific Pab (Cat. #AP3701a閿?) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are0.5ug per ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.